#### General Information

Geology- See file information

FEMA Map Flood Plain-



Census Information- see file information

Water Supply - The water supply to this area is primarily served by surface water intakes on Lake Michigan.

- 1) Gary Hobart Water Corporation- 2 intakes
  - 1. Borman Park
  - 2. Ogden Dunes

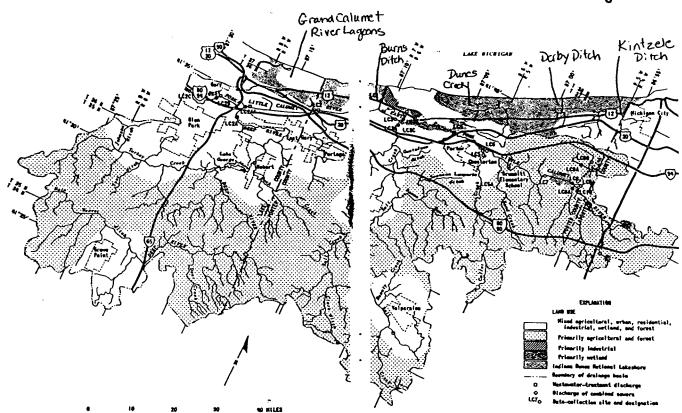
(see attached phone log for details)3

- 2) City of Hammond has an intake in Lake Michigan and serves all customers in city limits. Hammond sells water to Munster, Highland and Lansing Village Serves 105,900 people1
- 3) East Chicago- no wells used for drinking purposes. All served off of surface water intake.5
- 4) Whiting-does not have any municipal or private wells.5

Groundwater- Some residences and industries in area use groundwater See attached report for locations of GW users.1

Points of Entry- Drainage Ditch see below.2

Points of Entry.



A CONTRACT

Grand Calumet River discharges into Lake Michigan by way of Indiana Harbor Canal.

The East arm of the Little Calumet River. Deep River. and all of the West arm of the Little Calumet River east of Griffith, discharge into Lake Michigan through the Burns Waterway. Burns Ditch is the Western Arm of the Little Calumet River.

Primary Sensitive Environments see below2

Table 1 .-- Land use within drainage basins at the Indiana Dunes National Lakeshore Land use (percentage of total area) Agricul-Drainage Area (mi<sup>2</sup>) Public Wetture and Resi-Indus trial3 parks land forest Urban<sup>2</sup> basin dencial Grand Calumet 9 1 7 River lagoons 1.35 45 9 29 Little Calumet 331 2 1 75 8 11 3 River Kintzele ditch 12.7 12 4 54 8 19 3 Derby ditch 4.64 50 7 33 2 6 2 Dunes Creek 7.37 56 10 19 R 3

<sup>1</sup>Public parks generally include wetlands and forest. <sup>2</sup>Urban land use includes cities, towns, streets, and rail right of ways.

3Industrial land use includes landfills.

Primary Sensitive Environments cont.

Wetlands surround Cedar Lake, Lake George near Whiting, Lake George near Hobart, and Wolf Lake, 1

55% of Dunes Creek and Derby Ditch are used for park and wetlands. 2

## Precipitation

Mean annual precipitation across Lakeshore ranges from 36 inches in the West to greater than 40 inches in the east. Maximum and minimum monthly precipitations are generally in April and February, respectively. 2

#### Endangered Species

Pitchers Thistly-located in Lakeshore Dunes and Blowout areas. Lake and Porter counties.4

### Fishing

The West Arms of the little Calumet and Grand Calumet Rivers offer pear advance habitat due to heavy input from industrial and demestic pollution sources. Only rough fish population: exist carp and white suckers.

Although the main use of the Grand Calumet River : industrial name have been seen fishing along the river banks, (see attached phone log.)

Indiana Dunes State Park and National lakeshore have fishing on the beach and pier. Also have boat fishing along Lake Michigan.1

Lake Michigan-Commercial Fisheries as well as recreational fishing -coho and chinook salmon

- -steelhead
- -brown trout
- -yellow perchi

Recreation

Boating occurs on Little Calumet River.1

Swimming occurs at all Lake Michigan municipal beaches, including Indiana Dunes State Park.1

# Closing of Recreation Areas-

Dunes State Park has not shut down in the last two years due to chemical contamination. A portion (100-200ft. section), of the beach 12 miles east of Gary did close due to a high fecal count from Dune Creek emptying into Lake Michigan. This portion of the beach has shut down several times in the last two years. ( see attached phone log for reference.)

# References

Clark, Douglas, and D. Larrison, editors. Governor's Water Resource Study Commission, State of Indiana, The Indiana Water Resource, Availability, Uses, and Needs, 1980.

Hardy, Mark A., 1984. Chemical and Biological Quality of Streams at the Indiana Dunes National Lakeshore, Indiana, 1978-1980, Water-Resources Investigations 83-4208. U.S. Geological Survey, Indianapolis, Indiana.

Buczek. Ken. May 13. 1991. Vice President of Production and Engineering. Gary Hobart Water Corporation, telephone Conversation, contacted by Jennelle Marcereau of E & E.

U.S. Department of the Interior, November 6, 1987. Fish and Wildlife Service. Endangered Species List for Region V. Twin Cities. Minnesota.

Midco II Report. Cin file)

| ecology and environment, inc.                     | TELEPHONE LOG        |  |  |  |  |  |  |
|---|----------------------|--|--|--|--|--|--|
| CONTACT   | COMPANY or AGENCY    | POSITION   |  |  |  |  |  |
| Ken Bucrek  | Gary Hobart Water Co |  |  |  |  |  |  |
| CONTACT ADDRESS CONTACT PHONE NUMBER              |                      |  |  |  |  |  |  |
|   | S                    | 19-886-3770 SS8  |  |  |  |  |  |
| E&E EMPLOYEE                                      | DATE                 | TIME   |  |  |  |  |  |
| Jennelle Marcereau                                |                      | 2:30 pm  |  |  |  |  |  |
| PROJECT NUMBER SITE                               | IAME AND LOCATION    | <b>~</b> .   |  |  |  |  |  |
| Ga  | ry PA Drively        | ) .  |  |  |  |  |  |
| Oscussion Cary Hobart.                            | Water Corp. A        | us I intakes   |  |  |  |  |  |
| on Lake Michigan:                                 |                      |  |  |  |  |  |  |
| SHAGD (1) Borman Park,                            | - 3 miles north of   | biltration.  |  |  |  |  |  |
| plant - ~/m                                       | ile offshore in 4    | 0ftg water   |  |  |  |  |  |
| 34MD (3) Ogden Dunis                              | 1 - 1/2 mile due à   | north of   |  |  |  |  |  |
| - filtration plant ~'/2" offstore en 20 ft of     |                      |  |  |  |  |  |  |
| water.  |                      |  |  |  |  |  |  |
| Together they serve 188,000 people They are       |                      |  |  |  |  |  |  |
| combined into a common distribution septem.       |                      |  |  |  |  |  |  |
| These two intakes, durintly serve: Gary, Portage, |                      |  |  |  |  |  |  |
|   |                      |  |  |  |  |  |  |
| - Siel water wholesale to Sherwille, Griffith,    |                      |  |  |  |  |  |  |
| Ogden Dunes, New Chicago and City of Lake Station |                      |  |  |  |  |  |  |
| - Fivo small utilities these Zintakes serve       |                      |  |  |  |  |  |  |
| are Lincoln Garden                                | 3 and Turkey         | Creek Utilities  |  |  |  |  |  |
|   |                      |  |  |  |  |  |  |
|   |                      |  |  |  |  |  |  |
| SICHATORE   |                      | PACE   |  |  |  |  |  |
| Jennelle Marce                                    | uan                  | Samuel Marie |  |  |  |  |  |

| <b>A</b>                    | !                                     | REFERENCE                               |
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| Richard Baks                | Vake to Health Dept                   | Microbiologist                          |
| CONTACT ADDRESS             |                                       | CONTACT PHONE NUMBER                    |
| Crown Point,                | ZV . $($                              | 219) 755-3655                           |
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| DISCUSSION                  | Indiana PA's                          |   |
| Gary has about              | 100 wells used for a                  | drinking water                          |
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|                             | · ·                                   | •                                       |
| in Fast Chicago and Il      |                                       |   |
| of Gary rely prodominal     | ity on groundwater                    | for drinking                            |
| water purposes              | ·/                                    |   |
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| TDE 3:20 pm.   |             |                                  | •     |
| SITE Vulcan Materials 459 N                          | · Cline,    | Cary Inc                         | liana |
| CONTACT Gerone Figer                                 |             | 699944 -                         |       |
| City Engener for<br>Gory Board of W<br>Surface Water | nks.        | REFERENCE SITE NAME SITE ID IND9 | 7 #63 |
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Buthlun Greguette Date-april 2, 485

| ecology and environment,                | inc.          | TELEPHONE LO                        | G       |              |
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| CONTACT.                                |               | ohpany of agency<br>Whes State Park |         | POSITION     |
| CONTACT ADDRESS                         |               |                                     | CONTACT | PHONE NUMBER |
| Jim Broderick                           | D             | ate.<br>05/14/91                    | TIME    | 7:00au       |
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